



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,840	07/06/2001	Steven M. Strandberg	K0480/7003 JH	7823
23628	7590	11/06/2003		
WOLF GREENFIELD & SACKS, PC FEDERAL RESERVE PLAZA 600 ATLANTIC AVENUE BOSTON, MA 02210-2211			EXAMINER ARBES, CARL J	
			ART UNIT 3729	PAPER NUMBER

DATE MAILED: 11/06/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/900,840	STRANDBERG ET AL.	
	Examiner	Art Unit	
	C. J. Arbes	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 18 August 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-70 is/are pending in the application.

4a) Of the above claim(s) 55-63 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-54 and 64-70 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.

4) Interview Summary (PTO-413) Paper No(s). _____.

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____.

Applicants' Response to the office's Restriction which was mailed on or about 16 July 2003 has been duly noted. After carefully reviewing the Office's Restriction and Applicants' Response thereto, the Office concludes that the Restriction was and continues to be correct and proper. In view of this holding and further in view of Applicants' response thereto the Restriction is hereby and now **made Final**.

Applicants therefore are required to cancel all non-elected claims or take other appropriate action.

An Office Action of the merits of Claims 1-54 and 64-70 now follows.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 8, 13, 15, 64 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bloom; Pat No. 5,815,619; hereinafter '619.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-7, 9-12, 14, 16-54 and 65-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over the '619.

The '619 teaches an automatic assembly and inspection system for connecting a connector to a portion of a fiber wherein an exposed region of an optical cable is attached to a ferrule having a through bore. Molten metal is placed between the ferrule and an exposed portion of the optical fiber. Figure 3 is a Diagram of the overall system for automatic fabrication of the fiber optic device. The optical fiber is secured to a stationary gripping device and it can be moved along a predetermined path in order to position the optical fiber with respect to clamping devices. Once the optical fiber is clamped for fabrication an optical device can be formed. Once the optical device is formed the optical device can be terminated. The terminating assembly includes a splicer/cutter, a ferrule or connector feeder, a clamp and an alignment collar. The clamp is movable in three axes and is moved to clamp onto the optical fiber. The clamp then moves the optical fiber into engagement with the splicer/cutter which cuts the optical fiber. A connector is moved by a clamp from a connector feeder into a receiving position adjacent to and aligned with the splicer/feeder. An alignment collar is then moved into position for receiving and guiding the cut optical fiber into the connector. The splicer/cutter is removed and the clamp moves the cut end through the alignment collar and into the through bore. A self centering mold is used to allow molten metal to bond the connector and the optical fiber together. A sealant such as RTV silicone or an UV-cured acrylate can also be used to bond the ferrule and the exposed portion of the optical fiber. (Cf. Col 5) As applied to Claims 6, 29 and 67 It would have been obvious to one of ordinary skill in this art to provide an adhesive dispenser if in fact the '619 does not teach providing one inasmuch as Bloom does use an adhesive as a bonding

material and therefore in most all likelihood would have a dispenser in order to dispense the adhesive. As applied to Claim 9 it would have been obvious to include an orienter system that is responsive to a control signal because in this manner the connector would be positioned onto the optical fiber with increased efficiency and hence at lowered costs. The '619 further teaches that the optical fiber system is automated and therefore this would imply there was an orienter system and that it would be responsive to a control system. Similarly as applied to Claim 10 it would have been obvious to include a chuck with the chuck being moveably responsive to a control signal. By providing that the chuck would be responsive to a control signal, the connector would be positioned onto the optical fiber with increased efficiency and hence at lowered costs.

Claims 1-54 and 64-70 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Song et al.

Song et al teach a system for aligning and attaching optical fibers to optical wave guides. Service and alignment robots couple a wave guide and an optical fiber together. The service robot establishes the three dimensional position of the wave guide and the alignment robots three dimensionally align the input and outputs fibers to the legs of the wave guide. A vacuum holder is used to hold and rotate the optical fiber for polarization purposes. Precise alignment between optical wave guides and optical fibers is achieved by using a goniometer. An adhesive is used to cover an end of the optical fiber uniformly. A clamp is used to tangentially support the optical fiber. It is held to have been obvious to place a connector rather than a wave guide onto the end of the optical fiber. The examiner reserve the right to explain each and every limitation which

Applicants' draw in their many claims. For example Song does teach (a) that the service robot is capable of movement in 3 dimensions, that (b) the alignment robot is not only capable of movement in 3-dimensional but also can rotate, that (c) that detectors can operate to optimize fiber position, (d) adhesive dispenser labeled as Numeral 830; and many more specific parts and elements which are expressly or impliedly taught by Song et al

Any inquiry concerning this communication should be directed to C. J. Arbes at telephone number (703)308-1857.

Ca
CARL J. ARBES
PRIMARY EXAMINER